LHMP ANNEX
Metropolitan Transportation Commission (MTC)

Introduction

The Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating and financing agency for the nine-county San Francisco Bay Area. Created by the state Legislature in 1970 (California Government Code § 66500 et seq.), MTC functions as both the regional transportation-planning agency -- a state designation -- and for federal purposes, as the region's metropolitan planning organization (MPO). As such, it is responsible for the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle and pedestrian facilities. The Commission also screens requests from local agencies for state and federal grants for transportation projects to determine their compatibility with the plan.

Today MTC is three agencies in one: MTC, but also the Bay Area Toll Authority (BATA) and the Service Authority for Freeway Expansion (SAFE). These agencies have a broad portfolio of duties and a shared mission: to knit the region's 4,000 buses, trains and ferries, 1,400 miles of highway, 20,000 miles of local streets and roads, and eight toll bridges into a smooth-functioning network that gets the region's nearly 7 million residents where they need to go, when they need to get there. In its role as BATA, the agency is also responsible for managing a cooperative agreement with Caltrans for delivering the Regional Measure 1 (RM 1) bridge improvement program and coordinating the issuance of debt financing to deliver RM 1 projects, which includes the seismic retrofit of several bay area bridges.

MTC's is governed by a 19 member panel with 14 of the members are appointed directly by local elected officials, 2 members represent bay area regional agencies, and 3 members represent state and federal agencies. The region has a population of 6,783,760, based on the 2000 census[1]. For FY 04-05, MTC's combined budget is $49.4 million, including over $19.6 million in consultant and pass-through services. MTC employs a staff of 130 FTE.

The Planning Process

Because MTC's jurisdiction is the same as that covered by ABAG's Local Hazard Mitigation Plan, there was little additional effort conducted outside of the planning process for the overall multi-jurisdictional plan. The lead program in this effort is the Earthquake and Hazards Program in ABAG's Planning Department. This program has been actively mapping hazards and identifying risks since the mid-1960s, shortly after the formation of ABAG in 1961. This program has received grants from numerous federal and state agencies to do hazard identification and risk assessment, including from U.S. Geological Survey, the National Science Foundation, Caltrans, the California Office of Traffic Safety, and the Governor's Office of Emergency Services. In addition, the program has an award-winning website related to earthquakes and hazards initiated in 1995 at http://quake.abag.ca.gov. MTC staff participated in various ABAG workshops and meetings to develop the LHMP, including the general "kick-off" meeting and the Lifelines and Transportation Hazards Review Committee meetings.

[1] For complete Census information on this city, see **http://www.bayareacensus.ca.gov/**.

MTC has a 54% ownership share of single facility, the Joseph P. Bort MetroCenter building. It has been designated as a critical facility within the nine-county bay area region. MTC supports ABAG's inclusion of the Joseph P. Bort MetroCenter in the LHMP's overall list of "critical" facilities owned by other cities, counties, and special districts in the region. The MetroCenter is a condominium government office building occupied by its three owner-members: MTC, ABAG and BART. The building is a three-story structure with a full basement and roof penthouse and approximately 130,000 square feet. In 1983, the Regional Administrative Facilities Corporation (RAFC) was formed as a condominium association to manage the MetroCenter building operations. RAFC is governed by a board of directors made up of the Executive Directors of the 3 member agencies with MTC assuming overall building management responsibilities on behalf of RAFC.

In addition to housing MTC, ABAG and BART staff, as a public facility, the MetroCenter hosts a variety of public meetings including board and commission meetings, public hearings on planning, land use and transportation issues, hazard mitigation training and seminars. The building has a multi-purpose auditorium for hosting large meetings, and 8 conference rooms for smaller meetings. Most of the meetings are noticed so the public can attend with an average attendance of more than 20,000 attendees annually.

The MetroCenter also houses the following critical services that facilitate disaster and emergency response activities:

Regional Transportation Information Clearinghouse (MTC's EOC)
Together with the California State Department of Transportation (Caltrans), the State Offices of Emergency Services (State OES), and major Bay Area transit operators, MTC developed the Trans Response Plan (TRP) which sets a conceptual framework for a comprehensive and timely response by San Francisco Bay Area transportation providers to any major earthquake or disaster in the region.

BART's Emergency Operations Center (EOC)
BART's EOC is equipped with Status Display Boards, computers, a television, extra telephone lines, portable radios and other emergency equipment. The EOC will be used to coordinate, manage and provide mitigation planning for any major or catastrophic emergencies.

BART's Train Operations Control Center (OCC) Backup Facility.
The OCC is currently located in BART's Lake Merritt Administration building, across the street from the MetroCenter. However, in the event of an emergency and there was an evacuation of LMA and/or the OCC becomes inoperable, BART is fully capable of running train control operations from the MetroCenter facility.

California Emergency Services Radio System (CESRS)
The MetroCenter functions as a Regional Emergency Operations Center and houses one the CESRS [California Emergency Services Radio System], 153.755 MHz [154.980 input] which services as a backup communications if the phone land lines are disrupted. CESRS has 21 interconnected sites around the state (and 4 stand alone radios not interconnected). It is used for radio coordination between OES staff, and state facilities

in Sacramento, Fresno, Los Alamitos, Oakland, San Diego and San Luis Obispo; and between our Regional Emergency Operations Centers (EOCs) [in Oakland, Los Alamitos, and Sacramento] and around 30 county EOCs. The CESRS transmitter is located in the MetroCenter's roof and the communications device is in located in the 3rd Floor EOC.

Server Equipment for Web-hosting and Online Services
The MetroCenter currently houses several computer servers for ABAG and MTC that provide online access to local government agencies and public with a wealth of information including planning activities, mitigation and hazard maps, geographical information system maps to find statistical and economic data, listings of project that have received federal/state /local funding and other information databases that are unique to these agencies.

In addition to the activities explained in the overall plan, the RAFC Board of Directors held several public meetings to discuss the options for seismically retrofitting the MetroCenter to a Life Safety or Immediate Occupancy standard. These meetings were open to the public:

- At the April 1, 2004 meeting, the Board reviewed a 2002 "System-wide Seismic Vulnerability Study Report" commissioned by BART, which included an update analysis of the MetroCenter building. At this meeting the Board authorized a contract with Degenkolb Engineers to prepare an analysis reconciling the differences between the 1995 and 2002 seismic analysis reports and to propose retrofit options.
- At the April 1, 2004 meeting, the Board voted unanimously to authorize an agreement with Degenkolb Engineers to prepare a Building Occupancy Resumption Plan and to provide post-earthquake structural engineering services.
- At the May 18, 2004, Degenkolb gave a presentation to the Board on the seismic analysis reports. The Board authorized an agreement with Degenkolb to prepare mitigation options and the cost of seismically retrofitting the MetroCenter building.
- At the November 16, 2004 meeting, the Board reviewed a Voluntary Seismic Upgrade Conceptual Design Study and Cost Estimate Final Report prepared by Degenkolb Engineers. The purpose of this study was to develop conceptual design options and construction cost estimates for seismically upgrading the MetroCenter structure to the Life Safety and Immediate Occupancy Performance Levels per the guidelines of FEMA 356 Prestandard and Commentary for the Seismic Rehabilitation of Buildings. Two upgrade schemes, Life Safety and Immediate Occupancy, were developed.
- At the November 16, 2004 meeting, the Board also approved a contract with G&E Engineering to develop a benefit cost ratio report on the two proposed mitigation options.
- At the February 9, 2005 meeting, the RAFC Board reviewed a report prepared by G&E Engineering analyzing the benefit/cost ratio for undertaking the Life Safety and Immediate Occupancy schemes proposed by Degenkolb.
- At the February 9, 2005 meeting, the RAFC Board approved submittal of a FEMA Hazard Mitigation Grant application for costs associated with retrofitting the MetroCenter to a Life Safety standard. MTC will submit the grant application on behalf of RAFC and its member agencies.

Information on the overall LHMP, this Annex and the mitigation strategies were provided to the MTC Administrative Committee on April 13, 2005. The public was provided with an opportunity to comment on the priorities prior to or at that meeting. A resolution approving the LHMP Annex and mitigation strategies was adopted by the MTC Commission at their April 27, 2005 meeting.

Ongoing integration of the mitigation strategies identified in the MTC Annex will occur at MTC, particularly within the context of the Administrative Services Section which oversees the MetroCenter operations, Planning (for Emergency Services and Smart Growth) and Finance and Bridges and Highway (for the seismic retrofit bridge projects), Public Information and Outreach, and the Executive Office.

Hazard and Risk Assessment

The ABAG multi-jurisdictional Local Hazard Mitigation Plan, to which this is an Annex, lists nine hazards that impact the Bay Area, five related to earthquakes (faulting, shaking, earthquake-induced landslides, liquefaction, and tsunamis) and four related to weather (flooding, landslides, wildfires, and drought). All of these impact MTC's planning region. However, in MTC's role, as the regional transportation planning agency, drought has no impact on the provision of transportation services. With the other hazards, the ABAG multi-jurisdictional plan covers the hazard exposure of the nine-county bay area region. The hazard mapping activities of ABAG are included in the 53 maps maintained on ABAG website at **http://quake.abag.ca.gov/mitigation/**.

Information on disasters declared in the Bay Area is at **http://quake.abag.ca.gov/mitigation/disaster-history.html.**

Thus, the only remaining hazard and risk assessment discussion that needs to be covered in this Annex is the hazards and risks associated with MTC's single facility, the Joseph P. Bort MetroCenter. MTC has a 54% ownership in this single facility. The hazards associated with this facility are:

- Faulting – The MetroCenter is located 5 miles from the Hayward fault and 15 miles from the San Andreas fault.
- Shaking – The MetroCenter is in the next to highest category on the ground shaking potential map.
- Earthquake-induced Landslides – The MetroCenter is outside this zone.
- Liquefaction – While the MetroCenter is not in the CGS Liquefaction Zone, it is shown as subject to liquefaction to the USGS Liquefaction Susceptibility Map (Thus in MTC's FEMA PDM grant application, a site-specific test for liquefaction for the MetroCenter is included in the proposed seismic retrofit scope of work.
- Tsunamis – The San Francisco Bay Area region has not been mapped.
- Flooding – The MetroCenter is outside the 100-year and 500-year flood zones.
- Landslides – The MetroCenter is located on ground that is designated as flat land.
- Fire – The wildland fire threat is moderate but the MetroCenter is is located within the Wildland Urban Interface WUI-Threatened area.
- Dams – The MetroCenter is not subject to dam-failure inundation.
- Drought – The operations of the MetroCenter is not significantly impacted by drought conditions.

The MetroCenter building was built in 1982. In the 1989 Loma Prieta 6.9 earthquake, which was centered 75 kilometers from the site, the level of ground shaking was very low. This was not significant event for this location and the level of damage was very minor with limited non-structural damage. This very low level of damage is consistent with the very low levels of damage expected at very low levels of ground shaking.

The probability of future disaster is the same as discussed as the ABAG multi-jurisdictional LHMP. In conclusion, the most significant future event to impact the MetroCenter facility is an earthquake. Thus, MTC is focusing its efforts on earthquake mitigation measures as described in the following section. In the event of a major earthquake on the Hayward fault, the Benefit Cost Analysis work supporting the seismic retrofit project indicated that the structure would be a total loss with an estimated building replacement value of $26 million and $6.0 million for contents.

Mitigation Activities and Priorities

The overall goal and commitments of this Annex are consistent with the ABAG multi-jurisdictional plan as specified in the resolution adopting this plan.

As a participant in the ABAG multi-jurisdictional planning process, ABAG staff took a lead role in the development and review of the comprehensive list of mitigation strategies in the overall LHMP. MTC has identified mitigation strategies that the agency will implement on its own or on behalf of RAFC. ***Thus, when reviewing the priorities assigned to individual strategies on the pages that follow, it is important to understand that these are the priorities for MTC itself, not the overall priorities for the Local Hazard Mitigation Plan for the region.***

The mitigation priorities were discussed at meetings in February 2005 with MTC's Management, Administrative Services and the MetroCenter's Building Management staff involved in disaster recover, public information and outreach, finance, and bridges and highways. At these meetings, the mitigation strategies were reviewed. The tentative decision on priority was made based on a variety of criteria, not simply on an economic cost-benefit analysis. These criteria include being technically and administratively feasible, politically acceptable, socially appropriate, legal, economically sound, and not harmful to the environment or our heritage.

When reviewing the list of strategies, it is apparent that existing MTC policies and programs undertake many of the "non-traditional" mitigation activities. In addition, MTC's Bridges and Highway section manages a cooperative agreement with Caltrans for delivering the Regional Measure 1 (RM 1) bridge improvement program and, in conjunction with MTC's Chief Financial Officer, coordinates with internal and external financial advisors in the issuance of debt financing to deliver RM 1 projects. MTC has a major role in coordinating the activities of the Regional Transportation Information Clearinghouse EOC.

The priorities for the mitigation strategies were submitted to the MTC Executive Director for review. In addition, information on the overall LHMP, this Annex and mitigation priorities were reviewed by the MTC Administration Committee at their April 13, 2005 meeting. The public was provided with an opportunity to comment on the priorities prior to or at that meeting. A

resolution approving the overall LHMP, this Annex and mitigation strategies was adopted by the MTC Commission at their April 27, 2005 meeting.

Finally, MTC examined the hazard exposure information on its critical facility, the MetroCenter. MTC has determined that the combination of construction type, age, and shaking exposure to MetroCenter is significant. Therefore, MTC has joined with ABAG and BART to apply for a FEMA Pre-Disaster Mitigation grant to retrofit this building to a Life Safety standard, an action approved by the RAFC Board of Directors at their February 9, 2009 meeting.

As shown in the attached list, MTC's specific mitigation strategies and priorities will be implemented as part of the MTC's annual Overall Work Program which is reviewed and approved by the federal government. The Overall Work Program identifies the specific tasks that MTC will accomplish each year. There are no other planning mechanisms available to MTC that are appropriate.

The Plan Maintenance and Update Process

MTC Administrative Services department will ensure that **monitoring** of this Annex will occur. The plan will be monitored on an on-going basis. However, the major disasters affecting our community, legal changes, notices from ABAG as the lead agency in this process, and other triggers will be used. Finally, the Annex will be a discussion item on the agenda of the MTC Management staff at least once a year in April. At that meeting, the Section Managers will focus on **evaluating** the Annex in light of technological and political changes during the past year or other significant events. This group will be responsible for determining if the plan should be updated.

ABAG, as the lead agency in the planning process, has a plan update process already covered in the overall LHMP. MTC is committed to reviewing and updating this plan annex at least once every five years, as required by the Disaster Mitigation Act of 2000. MTC's Administrative Services Manager will contact ABAG four years after this plan is approved to ensure that ABAG plans to undertake the plan update process. If so, the MTC again plans to participate in the multi-jurisdictional plan. If ABAG is unwilling or unable to act as the lead agency in the multi-jurisdictional effort, other agencies will be contacted, including the County's Office of Emergency Services. Counties should then work together to identify another regional forum for developing a multi-jurisdictional plan.

The public will continue to be involved whenever the plan is updated and, as appropriate, during the monitoring and evaluation process. The public will have an opportunity to comment on changes to the Annex when presented to the MTC Commission for approval. All public comments will be reviewed and integrated into the plan updates whenever reasonable.